

# SERVICE MANUAL



## Universal operating table SU-02.0

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## 1. Table description

### 1.1. Use

Operating table SU-02.0 is to be used for dressing, surgeries, gynaecological, laryngologic, urologic operations, etc. The structure of the table makes it possible to take X-ray pictures during procedures and operations.

### 1.2. Technical specifications

• Total length of table top (with the headrest)	2025mm ± 15 mm
• Width of table top	500 mm ± 5 mm
• Minimum height of the top from the floor	750 mm ± 15 mm
• Maximum height of the top from the floor	1000 mm ± 15 mm
• Backrest raise angle	70°
• Backrest lowering angle	40°
• Kidney bench raise angle	110°
• Footrest raise angle	15° (4 and 5 sectional table top)
• Footrest raise angle	70° ( 6 sectional table top)
• Footrest lowering angle	90°
• Footrests widening angle	0-180°
• Angle of side inclination	± 25°
• Headrest raise angle	50°
• Headrest lowering angle	20°
• trendelenburg	30°
• anti-trendelenburg	25°
• Table weight	about 160 kg
• Nominal working load	135 kg
• Lifetime	10 years

### 1.3 Installation of accessories

Any extra equipment other than manufacturer offers for this table, which would disturb or support the table operation, may be mounted or installed only when the manufacturer issues suitable approval in writing.

#### 1.3.1 Extra accessories offered by the manufacturer

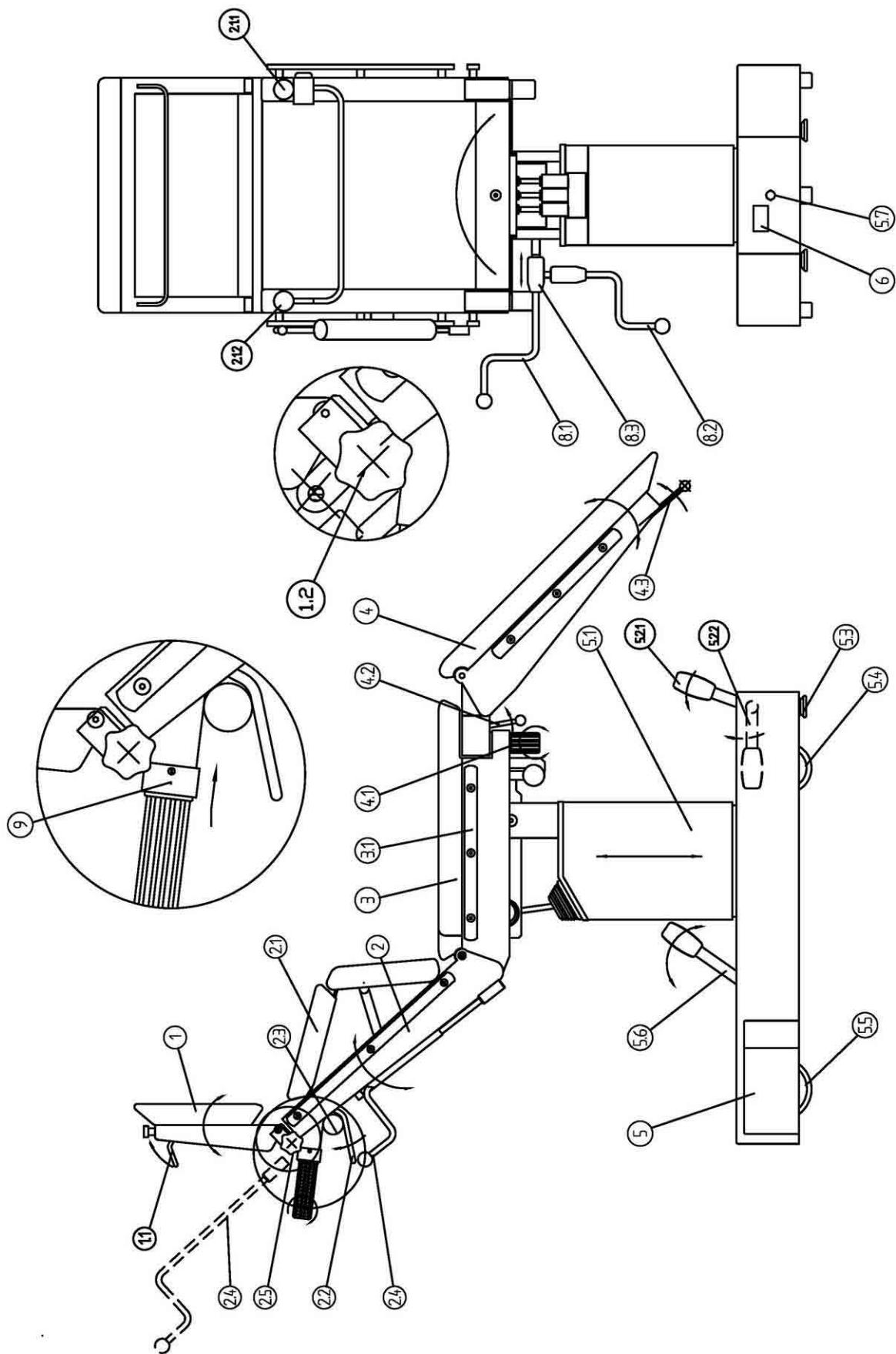
The following extra accessories may be provided with the operating table SU-02.0:

	accessory	Symbol
1	Screen frame	WS-01.5
2	Screen frame with width regulation	WS-01.6
3	Hand grip	WS-02.5
4	Thigh grip	WS-03.5
5	Shank grip	WS-04.5
6	Knee support	WS-05.5
7	Left and right arm support	WS-06.5
8	Hand angular support	WS-07.5

9	Big supporting bolster	WS-08.5
10	X-ray tray	WS-11.5
11	Trolley for accessories	WS-13.5
12	Grip for anaesthesiologic pipes	WS-14.5
13	Table for tools	WS-15.5
14	Single position stripe	WS-16.5
15	Multiposition clamp mechanism	WS-17.6
16	Multiposition clamp mechanism with shift	WS-17.7
17	Tray for X-ray plate	WS-19.6
18	Specialist headrest	WS-21.5
19	Laryngology-ophthalmic headrest with track	WS-21.7
20	Head rest for cervical kerb	WS-21.8
21	Hand support	WS-22.5
22	Body strap	WS-23.0
23	gynaecologic attachment	WS-28.5
24	urological attachment	WS-29.5
25	Proctologic attachment	WS-30.5
26	Complete handrails	WS-32.5
27	Side x-ray handle	WS-33.0
28	Wrist grip	WS-34.5
29	attachment do arthroscopy	WS-39.5
30	attachment for meniscus operation	WS-40.5
31	Belly belts	WS-41.0
32	Footrest belts	WS-42.0
33	Hand belt	WS-43.0
34	Thigh belt	WS-44.0
35	specialist head bolster - narrow	WS-45.5
36	specialist head bolster - wide	WS-46.5
37	attachment for hand surgery	WS-47.5
38	A support for hand surgery	WS-48.5
39	Womb support	WS-49.5
40	Side support	WS-50.5
41	Side rest with lever	WS-50.6
42	Chest support	WS-52.5
43	side stripe lengthening unit	WS-53.0
44	Shoulder side rest	WS-59.5
45	Lithotomic stirrups	WS-64.5
46	Mattress for backbone	WS-65.0
47	Semi-bolster	WS-66.0
48	Bolster for neck	WS-68.0
48	Bolster for neck	WS-68.0
49	Head bolster	WS-69.0
50	Upper arm operating support	WS-87.5
51	Roller lift	WS-88.5
52	Sieve for urological bowl	WS-89.5
53	Not-divided leg-rest	SG-42.0

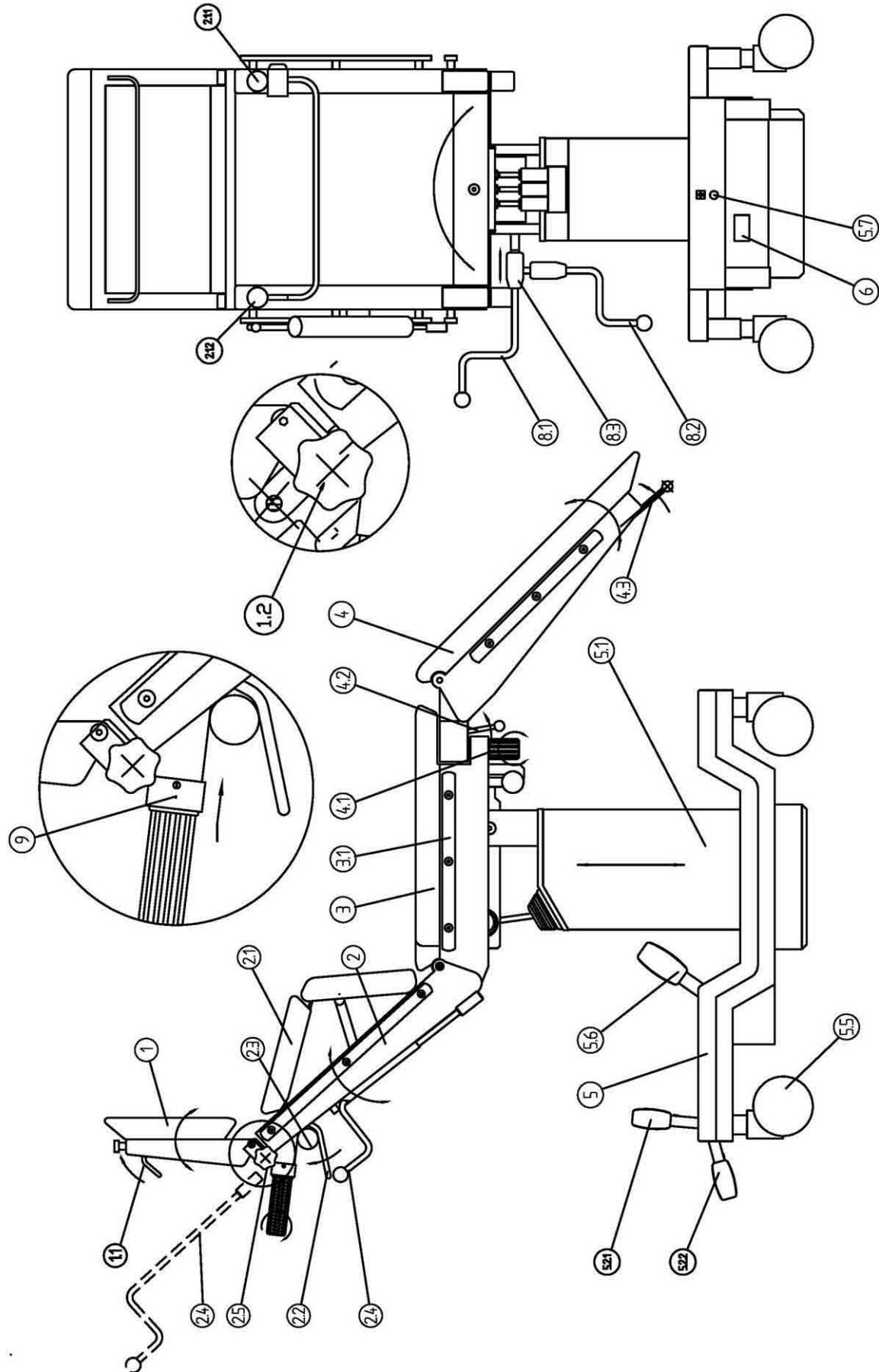
54	Gynaecological-urological section	SG-44.0
55	Drip hanger	WK-01.5
56	Orthopaedic attachment	SO-09
57	Orthopaedic attachment	SO-08.3
58	Gynaecological attachment	STIRRUPS
59	Neurosurgery attachment	DORO

## **1.4 Description of elements**



## **drawing 1 Operating table SU-02 with standard base**

item on drawing 1	Description
1	Headrest
1.1	Headrest angle change lever
1.2	Headrest blockade screw
2	Backrest segment
2.1	Kidney bench
2.1.1	Trendelenburg angle change handle
2.1.2	Handle
2.2	Backrest angle change lever
2.3	Lever blockade
2.4	Kidney bench crank
2.5	Crank screw
3	Seat segment
3.1	Side strips
4	Footrest segment
4.1	Footrest restoring knob
4.2	Footrest blockade lever
4.3	Footrest angle change lever
5	Base
5.1	Column
5.2.1	Blockade pedal: released
5.2.2	Blockade pedal: blocked
5.3	Feet
5.4	Rotary wheel
5.5	Wheels
5.6	Hydraulic pump pedal
5.7	Potential equalising clamp
6	Name plate
8.1	Crank for side inclination angular change
8.2	Crank for side inclination angular change
8.3	Crank blockade
9.	Handle turn block



## Drawing 2 Operating table SU-02 with mobile base

item on drawing 1	Description
1	Headrest
1.1	Headrest angle change lever
1.2	Headrest blockade screw
2	Backrest segment
2.1	Kidney bench
2.1.1	Trendelenburg angle change handle
2.1.2	Handle
2.2	Backrest angle change lever
2.3	Lever blockade
2.4	Kidney bench crank
2.5	Crank screw
3	Seat segment
3.1	Side strips
4	Footrest segment
4.1	Footrest restoring knob
4.2	Footrest blockade lever
4.3	Footrest angle change lever
5	Base
5.1	Column
5.2.1	Blockade pedal: released
5.2.2	Blockade pedal: blocked
5.5	Wheels
5.6	Hydraulic pump pedal
6	Name plate
8.1	Crank for side inclination angular change
8.2	Crank for side inclination angular change
8.3	Crank blockade
9.	Handle turn block

## 1.5 Structure description

All metal elements exposed to external factors are made of acid-proof, stainless steel. Table top segments are made of steel profiles with rectangular cross-section. Height can be changed thanks to a hydraulic servo-motor and a foot pump. The basis of the table can be rolled and has a central blockade which is locked and unlocked with a foot pedal. Change of the angle of backrest segment, the footrest segment and the headrest segment as well as of trendelenburg is facilitated by gas springs which are moved by levers located in places convenient for an operator. The table may be inclined to its side by means of a crank placed on its side below the seat segment. The table top is provided with easily dismountable polyurethane mattresses which are antistatic and resistant to disinfecting agents and penetration of X-rays. On both sides of the top there are side strips which allow to install accessories. The whole table is antistatic.

## 1.6 Critical parameters

Maximum load 135 kg

## **1.7 General Assembly Notes**

- Prior to commencement of maintenance operations make sure whether the table has been disinfected,**
- Seat all bolts on removable adhesive,**
- Grease all moving elements with the OBEEN-3 grease during assembly,**
- During assembly make sure to check if all potential compensation cables are precisely screwed down,**

## **2. Selected parts - replacement**

Operations described below should be done during replacement of parts particularly exposed to wear or damage.

## 2.1 Head section set

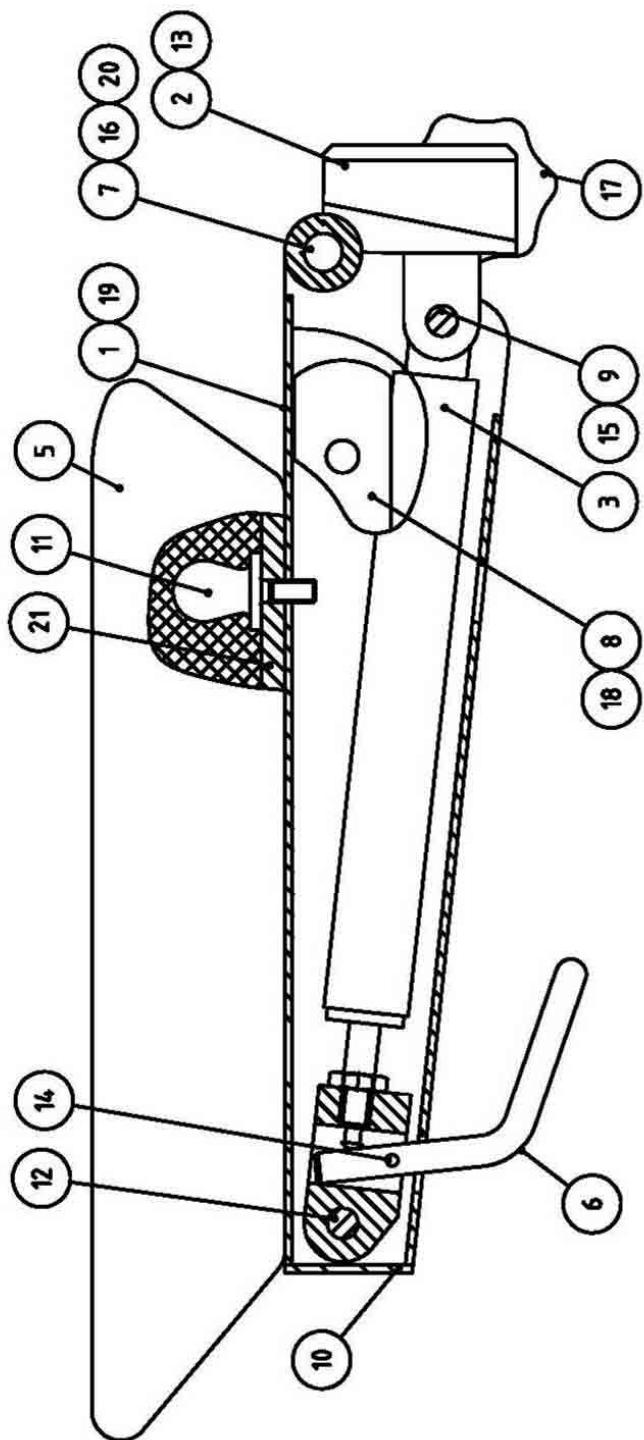


Fig.3 Head section set

Pos. on the drawing No. 9	Part's name	Quantity	Part article number	Remarks
1.	Skeleton	1	C0801010000000000	
2.	Clamp holder (right)	1	C07430200000P000	
3.	Head section driving	2	C047314030000000	

	aggregate-right			
5.	Headrest mattress	1	C0801050000000000	
6.	Lever	1	C074300000006000	
7.	Headrest spindle	2	C074300000007000	
8.	Headrest side rail	2	C074300000008000	
9.	Spindle	2	C074300000009000	
10.	Rails' muff	2	C040300000700002	
11.	Dowel pin	4	C080100000012000	
12.	Screw M8x50-A4-70	2	S06532080500005	
13.	Clamp holder (left)	1	C07430200000L000	
14.	Screw M4x20-A4-80	2	S06531040200001	
15.	Mounting ring Z8-A2	2	S06394000000800	
16.	Distance sleeve	1	C047300000022000	
17.	Handwheel M10x25 A2-50	2	R30057-100500251	
18.	Screw M8x30 A4-80	4	S06532080300007	
19.	Nameplate	1	C00TF32000000000	
20.	Starlock Ø10	2	R50010-10-02-000	
21.	Headrest plate	1	C080100000021000	

## 2.1.1 Replacement of pneumatic springs

### Disassembly of pneumatic springs (item 3)

1. Unscrew both M4 screws (item 14) and remove the lever (item 6),
2. Unscrew two M8 screws (item 12) which fix the connectors to the body (item 1),
3. Unscrew both pivots (item 7) and remove the clamping grip (item 2 and 13) with pneumatic springs (item 3) from the body of the headrest (item 1),
4. Remove the Z8 spring retaining ring (item 15), remove the pivot (item 9) and pull out the pneumatic spring (item 3),
5. Loosen the nut that locks the spring,
6. Unscrew the pneumatic spring from the connector.

### Assembly of pneumatic springs (item 3)

1. Screw down the pneumatic spring (item 3) to the connector and screw down the locking nut,
2. Put the pneumatic spring (item 3) in the socket in the clamping grip (item 2 and 13),
3. Place the pivot (item 9) fixing the pneumatic spring with the clamping grip,
4. protect the pivot (item 9) with the spring retaining ring (item 15),
5. Put the clamping grip with pneumatic springs in the body and screw down the pivots (item 7),
6. Screw down both M8 screws (item 12) which fix the connectors to the body (item 1),
7. Place the lever (item 6) and screw down the M4 screws (item 14)

## 2.2 Seat section

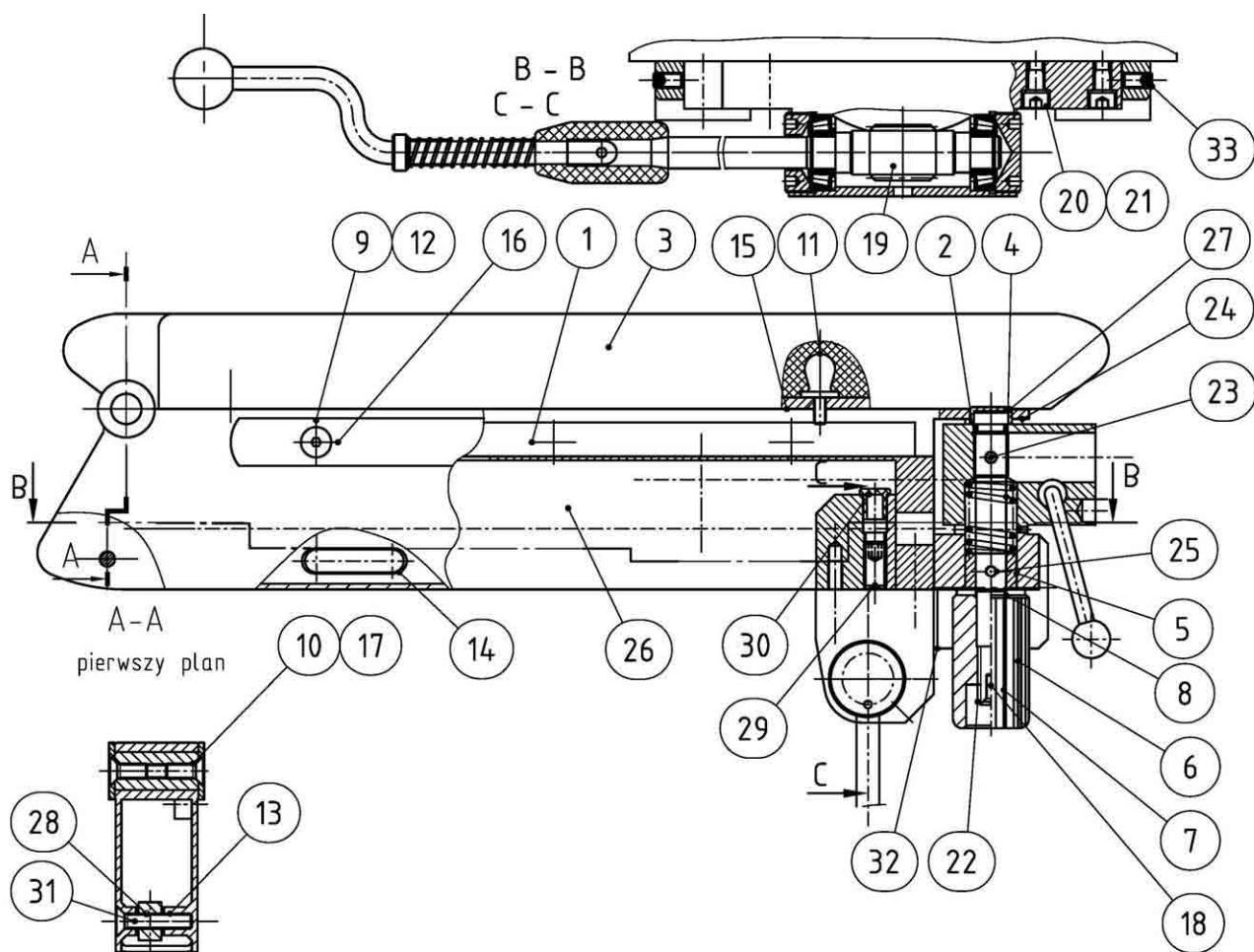


Fig.4 Set of seat

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Skeleton I set	1	C0901010000000000	
2	Leg section holder (right)	1	C04731103000P000	
3	Seat section mattress	1	C0901030000000000	
4	Spring	2	C047311000012000	
5	Sliding sleeve	2	C047311000043000	
6	Handwheel set	2	C047311400000000	
7	Washer I	2	C047311000015000	
8	Washer II	2	C047311000016000	
9	Side rail	2	C067600001100000	
10	Small pin	2	C047311000022000	
11	Dowel pin	4	C080302000010000	
12	Strip sleeve	6	C047311000025000	
13	Washer ø 8	8	C047311000026000	
	Gum sleeve	1	S097413J1000660	
15	Seat rest plate	1	C090100000015000	
16	Screw M8x40-A4-80	6	S06532080400001	
17	Screw M8x20-A4-80	4	S06532080200010	
18	Screw M6x16-A4-80	2	S06532080160005	
19	Worm set	1	C047317000000000	
20	Screw M8x25-A2-70	4	S06531080250004	
21	Washer A8	4	S06534082000001	
22	Special screw	2	C047311000200000	
23	Straight pin	2	S06535060603608	
24	Washer	2	C047311000044000	
25	Screw M6x10-A2-50	4	S06532060100017	
26	Nameplate	1	C00TF32000000000	
27	Leg section holder (left)	1	C04731103000L000	
28	Sleeve	2	C067600002000000	
29	Set screw M12x25-A2-70	2	S06532120250003	
30	Furniture stopper	2	CZ01000000000002	
31	Screw M8x35-A4-80	2	S06532080350013	
32	Handwheel 2050/M-M10-A4-80	2	R30057-100500251	
33	Set screw M8x16-A2-70	2	S06532080160001	

### 2.2.1 Replacement of bearings in the side inclination mechanism

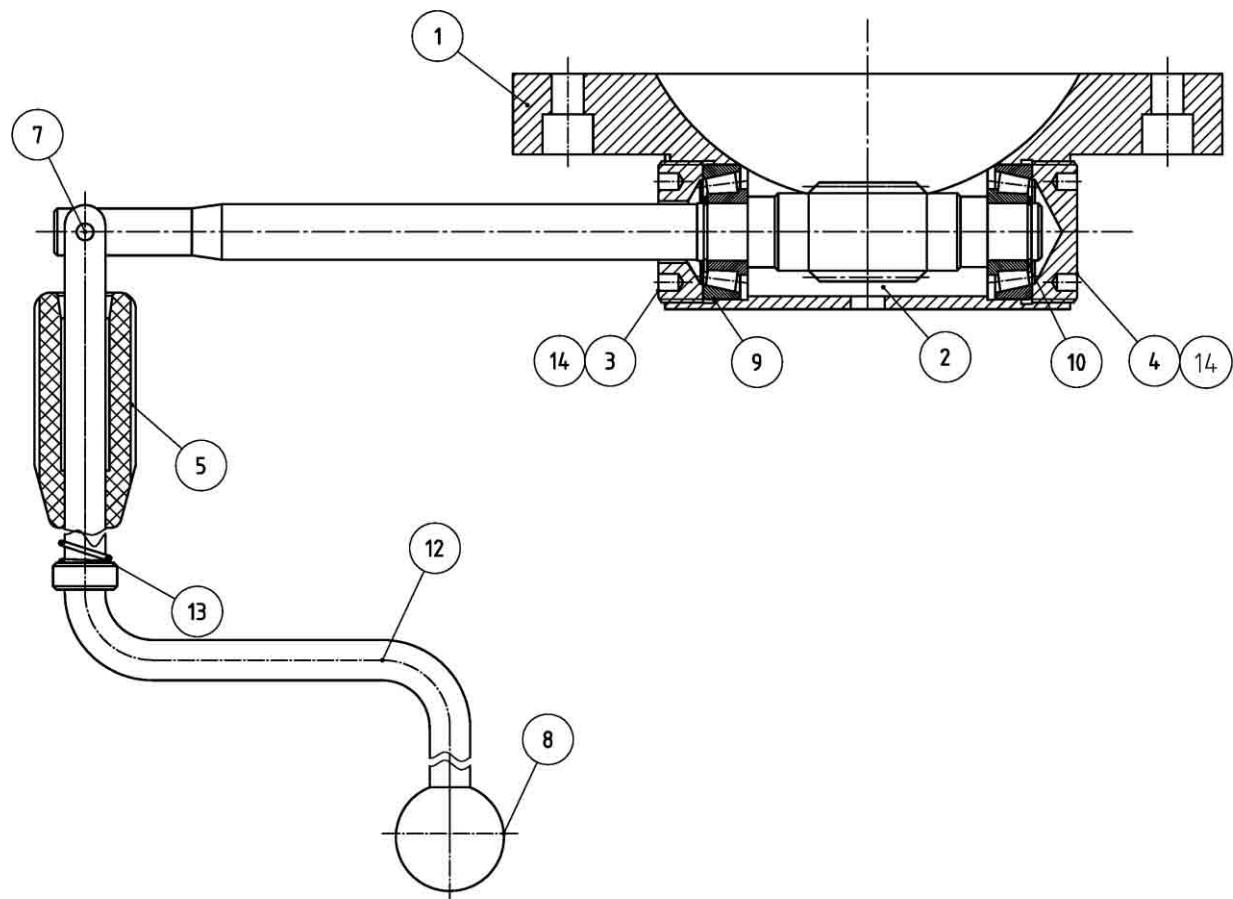


Fig.5 Worm set

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Body of worm	1	C047317000001000	
2	Worm	1	C047317000002000	
3	Stopper I	1	C047317000003000	
4	Stopper II	1	C047317000004000	
5	Slide	1	C047317000005000	
7	Straight pin	1	S06535060401400	
8	Round knob	1	C047317000006000	
9	Cone bearing	2	S06310003020300	
10	Spring retaining ring	2	S06393000001700	
12	Crank set	1	C047317020000000	
13	Spring	1	C047317000013000	
14	Set screw M6x10-A2-70	2	S06532060100010	

Disassembly of bearings (item 9)

1. Unscrew two set screws (item 14) and unscrew the stoppers I and II (item 3 and 4) from the body (item 1).
2. Remove the worm (item 2) from the body (item 1).
3. Remove spring retaining rings (item 10) and disassembly the bearings (item 9).

Assembly of spring (item 4)

1. Place the bearings (item 9) and protect them with spring retaining rings (item 10).
2. Place the worm (item 2) in the body (item 1).
3. Screw down stoppers I and II (item 3 and 4) to the body (item 1).
4. Remove plays in the worm by screwing down stoppers I and II (item 3 and 4).
5. When the adjustments have been done, protect the stoppers with set screws (item 14).

## 2.2.2 Replacement of springs in the mechanism that locks the footrest handle

Leg section holder left (item 27, fig.4)

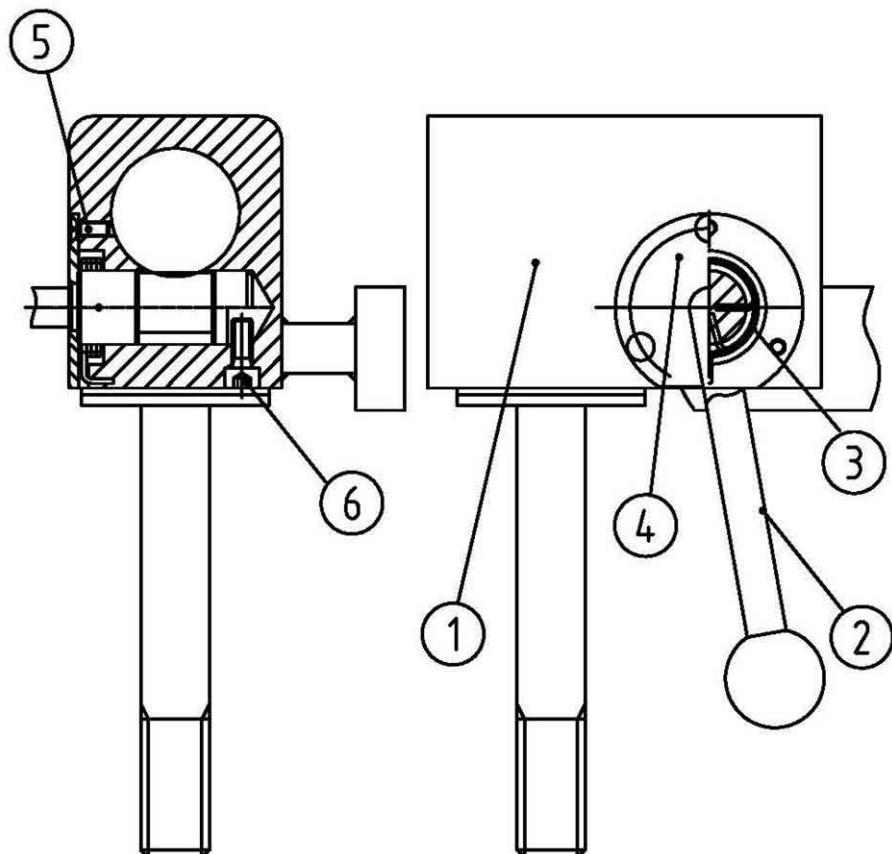


Fig.6 Leg section holder

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Left body set	1	C04731103010L000	
2	Left lock set	1	C04731103020L000	
3	Shield	1	C047311030003000	
4	Spring	1	C047311030004000	
5	Screw M3x6-A4-70	3	S06532030080013	
6	Screw M4x8-A2-50	1	S06531040080003	

*Disassembly of the spring (item 4)*

1. Unscrew three M3 screws (item 5) and remove the lock set (item 2) with a disk (item 3) and a spring (item 4).
2. Unscrew the ball knob from the lock set (item 2) and remove the disk (item 3).
3. Release the protection and remove the spring (item 4).

*Assembly of a spring (item 4)*

1. the spring (item 4) on the handle of the lock (item 2) and protect by putting the end of the spring in the opening in the axis of the lock.
2. Put the disk (item 3) on the handle of the lock (item 2) and screw the ball knob.
3. Place the assembled lock in the body (item 1).
4. Screw three M3 screws (item 5).

The screw in the right handle of the footrest (item 2, fig. 4) should be replaced in the same way.

## 2.3 Backrest segments

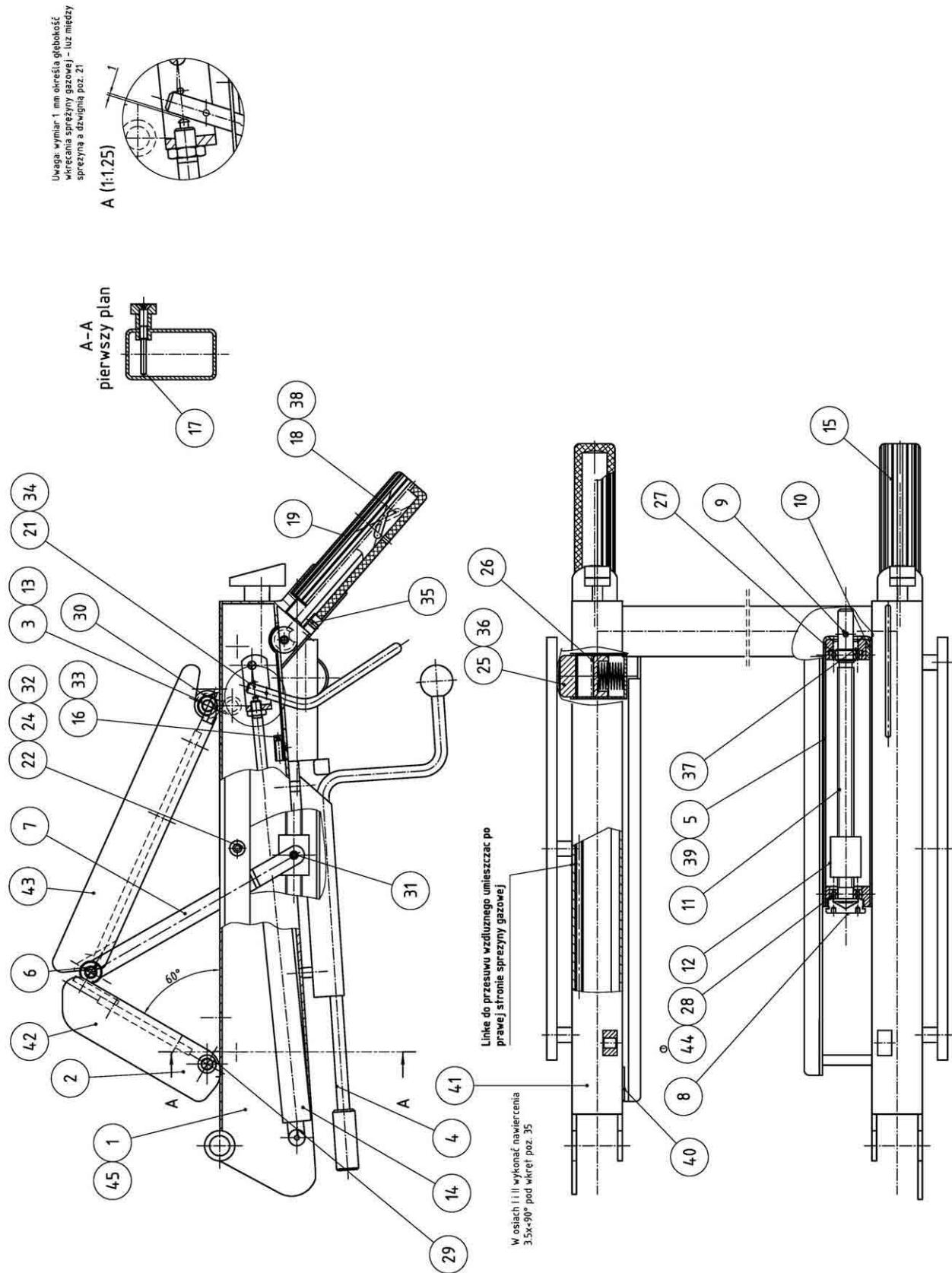


Fig.7 Backrest set

Pos. on the drawi- ng No. 7	Part's name	Quan- tit y	Part article number	Remarks
1	Body set	1	C080301000000000	
2	Kidney bench set	1	C080302000000000	
3	Roll set I	1	C067203000000000	
4	Crank set	1	C067204000000000	
5	Cover	1	C067200000005000	
6	Pivot	1	C067200000006000	
7	Arm	1	C080300000700000	
8	Clamp	1	C067200000008000	
9	Pin	1	S06535060502009	
10	Washer	1	C067200000010000	
11	Screw	1	C080300000011000	
12	Nut	1	C067200000012000	
13	Roll II	1	C067200000013000	
14	Left backrest drive	1	C04731104000L000	
15	Axis set I	1	C047311080000000	
16	Bumper set	1	C047311230000000	
17	Special screw	1	C080200000027000	
18	Axis II	1	C047311000009000	
19	Handle II	1	C047311000011000	
21	Lever	1	C047311000018000	
22	Backrest strip I	2	C047311000020000	
24	Strip sleeve	6	C047311000025000	
25	Lock	1	C067200000025000	
26	Spring	1	C047311000039000	
27	Bearing Ø32 Ø15/9	1	S06310000700000	
28	Bearing Ø32 Ø10/9	1	S06310001110000	
29	Special screw I	2	C067200000029000	
30	Special screw II	1	C067200000030000	
31	Screw	2	S06532080120006	
32	Screw M8x40-A4-80	8	S06532080400011	
33	Screw M3x10-A4-80	2	S06532030100009	
34	Screw M4x20-A4-70	2	S06531040200000	
35	Screw M8x10-A2-50	2	S06532080100004	
36	Screw M3x12-A2-70	2	S06532030120006	
37	Spring retaining ring Z15	1	S06390000001500	
38	Cylindrical pin 5x36	1	S06535060503601	
39	Screw M4x10-A2-70	4	S06532040100007	
40	Data plate	1	C00TF32000000000	
41	Right backrest drive	1	C04731104000P000	
42	Mattress set I	1	C080300000042000	
43	Mattress set II	1	C080300000043000	
44	Spring retaining ring Z10	1	S06390000001000	
45	Knob M10/Ø50/ length 25mm	2	R30057-100500251	

### 2.3.1 Replacement of pneumatic springs of the backrest

Disassembly of pneumatic springs (item 14, 41 on fig. 7)

1. Unscrew the M4 screw (item 34) and remove the lever (item 21).
2. Unscrew two M8 screws (item 31 on fig. 4) in the seat segment which fix pneumatic springs to the seat frame while supporting the backrest segment so that it does not fall.
3. Lift the backrest segment to the maximal upper angular position and protect it from falling by an external support.
4. Unscrew the M8 screw (item 32) which fixes the connector of the backrest drive (item 14, 41) to the framework (item 1) and take the backrest drive (item 14, 41) from the framework of the backrest (item 1).
5. Loosen the locking nut
7. Unscrew the pneumatic spring from a connector
8. Repeat activities from items 4 ÷ 7 for the second pneumatic spring.

Assembly of pneumatic springs (item 14, 41: fig. 7)

1. Lift the backrest segment to the maximal upper angular position and protect it from falling with an external support.
2. Screw the pneumatic spring to the connector and screw down the locking nut.
3. Put the backrest drive (item 14, 41) in the frame of the backrest (item 1).
4. Screw the M8 screw (item 32) which fixes the backrest drive to the backrest framework (item 1).
5. Repeat activities from items 2 ÷ 4 with the other spring.
6. Screw both M8 screws (item 31 on fig. 4) which fix pneumatic springs to the framework of the seat segment (item 1).
7. Remove the external support of the backrest segment.
8. Put the lever (item 21) and screw M4 screws (item 34).

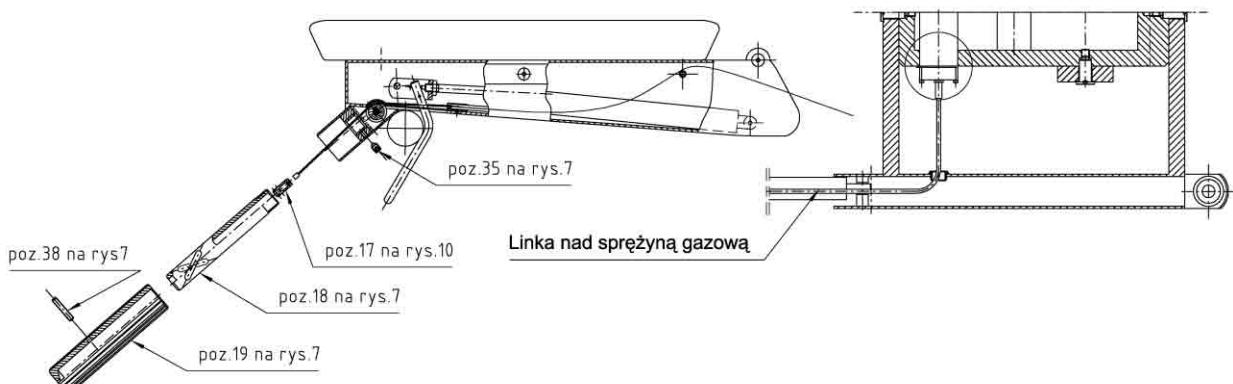


Fig.7a Replacement of trendelenburg cord

### 2.3.2 Replacement of trendelenburg cord

Disassembly of cord set (item 1 on fig. 11)

1. Catch the crosshead with the end of the cord (item 4 on fig. 11), screw the screws (item 12a on fig. 11) which fix the cover.
2. Pull the cord through the fair-lead in the seat framework and further to the backrest framework (over the pneumatic spring).
3. Put the end of the armour in the bumper set (item 16 on fig. 7) and pull it through the roll in the upper part of the framework of the backrest.

4. Put a driver (item 17 on fig. 10) on the end of the cord and pull it through the axis II (item 18 on fig. 7) which should be screwed to the framework of the seat.
5. Place the handle II (item 19 on fig. 7), put a peg (item 38 on fig. 7) through the handle II, the axis II and the driver.

**The backrest with a kidney bench are described in items 2.3.1 and 2.3.2. In a backrest without a kidney bench elements are replaced in a similar way.**

## 2.4 Footrest

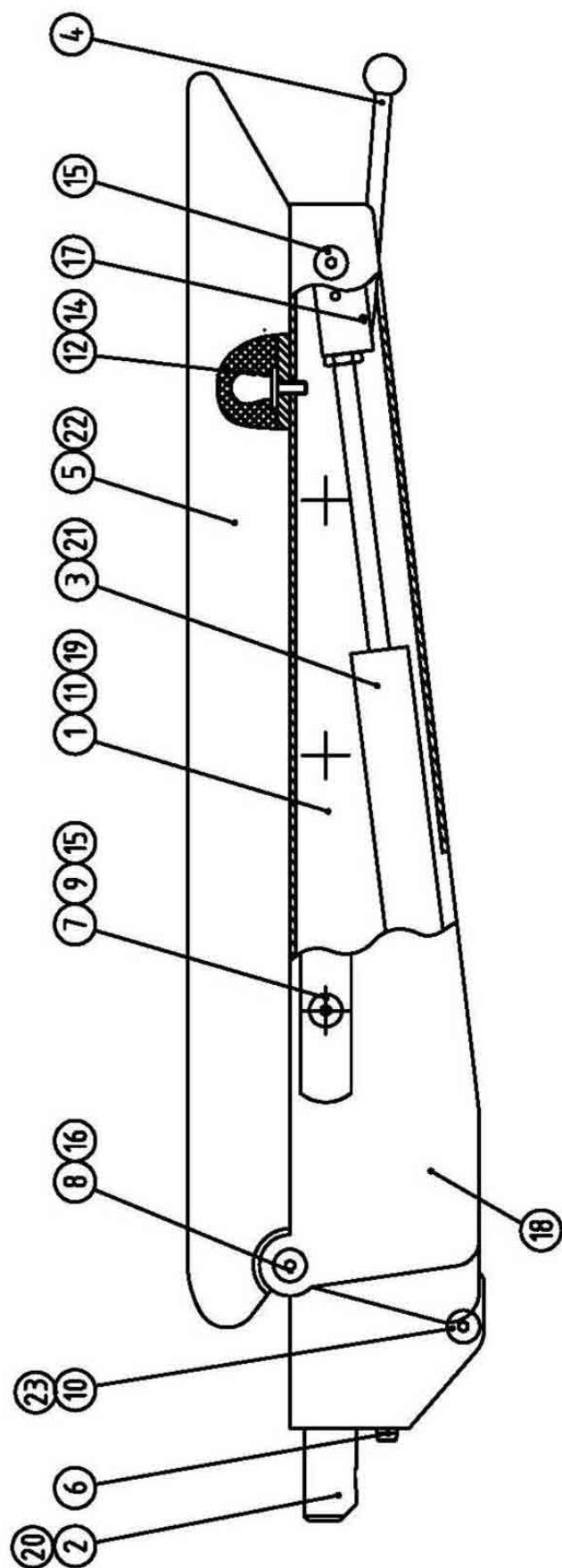


Fig.8 Footrest set

Pos. on the drawi ng No. 7	Part's name	Qua ntit y	Part article number	Remarks
1	Framework	1	C08080100000P000	
2	Articulation set	1	C04731202000P000	
3	Footrest drive	1	C04731203000P000	
4	Lever set	2	C047312040000000	
5	footrest mattress	1	C08080500000P000	
6	Special screw	2	C047312000006000	
7	Side strip	2	C047311000019000	
8	Small pivot	2	C047311000022000	
9	Strip sleeve	6	C047311000025000	
10	Washer Ø8	8	C047311000026000	
11	Stopper	2	S13622882603030	
12	Dowel pin	6	C080100000012000	
13	Footrest plate	2	C080800000014000	
14	Screw M8x40-A4-80	8	S06532080400011	
15	Screw M8x20-A4-80	4	S06532080200010	
16	Screw M4x20-A4-80	2	S06531040200001	
17	Data plate	2	C00TF320000000000	
18	Framework	1	C08080100000L000	
19	Articulation set	1	C04731202000L000	
21	Footrest drive	1	C04731203000L000	
22	Footrest mattress	1	C08080500000L000	
23	Screw M8x35-A4-80	2	S06532080350005	

#### 2.4.1 Replacement of pneumatic springs

Disassembly of pneumatic springs (item 3 or 21)

1. Unscrew both M4 screws (item 17) and remove the lever (item 4),
2. Unscrew two M8 screws (item 15) which fix the connectors to the framework (item 1 or 19),
3. Unscrew two M8 screws (item 23) and remove the pneumatic spring (item 3 or 21) from the footrest framework (item 1 or 19),
4. Loosen the nut that locks the spring,
5. Unscrew the pneumatic spring from the connector.

Assembly of pneumatic springs (item 3 or 21)

1. Screw the pneumatic spring (item 3 or 21) to the connector and screw down the nut that locks the spring.
2. Put the pneumatic spring in the framework by putting the end of the spring on bosses situated in the articulation (item 2 or 20) and screw the M8 screws (item 23),
3. Screw two M8 screws (item 15) which fix the connectors to the framework (item 1 or 19),
4. Place the lever (item 4) and screw the M4 screws (item 17).

## 2.5 Divided footrest

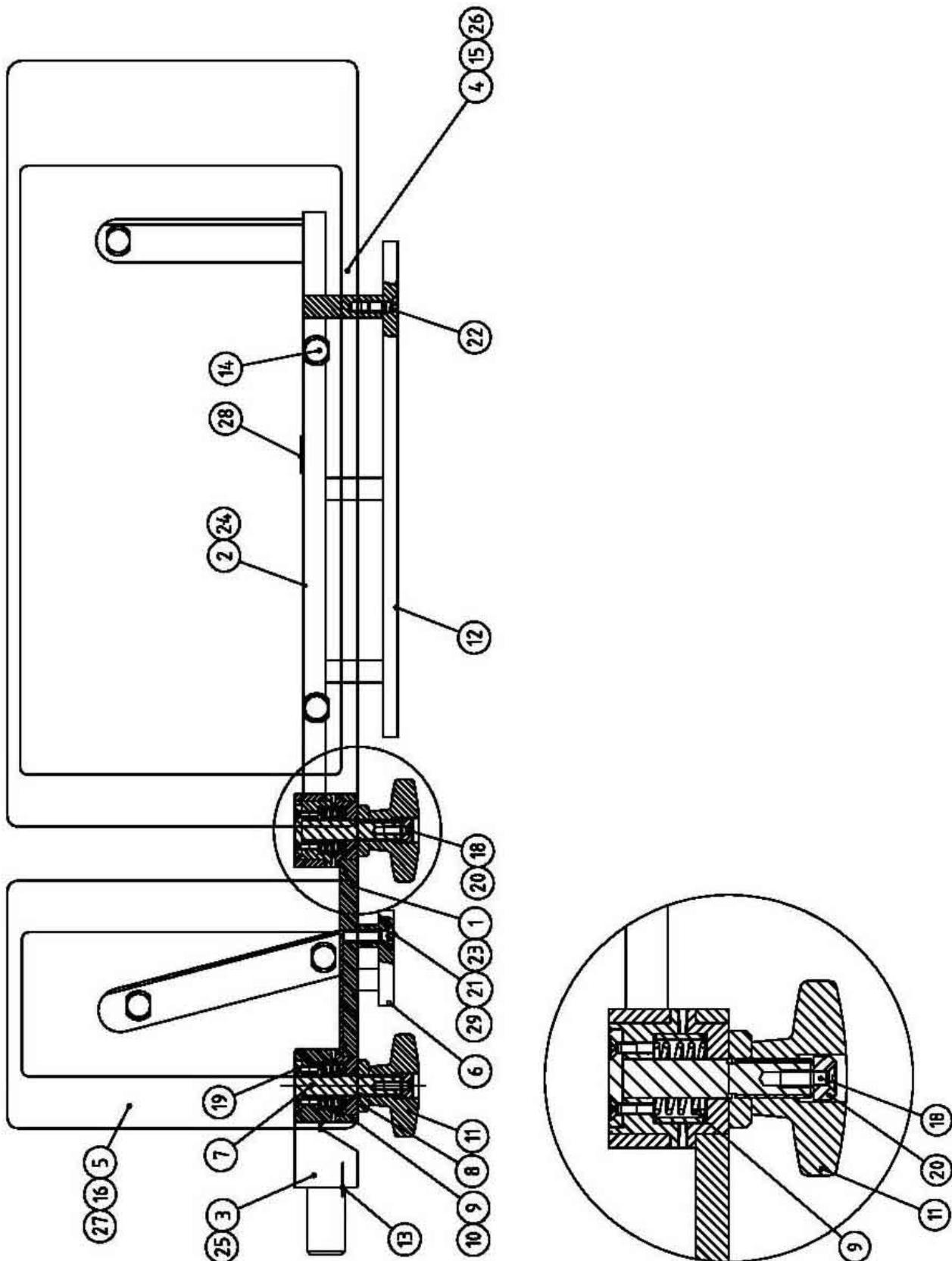


Fig.9 Divided footrest

Pos. on the drawi ng No. 7	Part's name	Quantity	Part article number	Remarks
1	Framework set I (right)	1	C12820100000P000	
2	Framework set II (right)	1	C12820200000P000	
3	Bracket set I (right)	1	C12820300000P000	
4	Footrest mattress	1	C08090400000P000	
5	Small footrest mattress	1	C08090500000P000	
6	Strip	2	C067700000006000	
7	Special screw II	4	C067700000007000	
8	Washer	4	C067700000008000	
9	Sleeve	4	C067700000009000	
10	Spring	4	C067700000010000	
11	Knob	4	C060000000700000	
12	Side strip	2	C047311000019000	
13	Special screw	2	C047312000006000	
14	Dowel pin	10	C080100000012000	
15	Footrest plate	2	C080900000015000	
16	Small footrest plate	2	C080900000016000	
17	Screw M6x16-A2-50	4	S06532060160011	
18	Screw M4x10-A2-50	8	S06532040100011	
19	Washer III	4	C060000001200000	
20	Screw M8x35-A4-80	4	S06532080350005	
21	Screw M8x20-A4-80	6	S06532080200010	
22	Framework set I (right)	1	C12820100000L000	
23	Framework set II (right)	1	C12820200000L000	
24	Bracket set I (right)	1	C12820300000L000	
25	Footrest mattress	1	C08090400000L000	
26	Small footrest mattress	1	C08090500000L000	
27	Data plate	2	C00TF320000000000	
28	Strip sleeve	4	C047311000025000	

## 2.5.1 Knob replacement

### Disassembly of the knob (item 11)

1. Unscrew the M6 screw (item 18),
2. Remove the washer III (item 20),
3. Unscrew the knob (item 11).

### Assembly of the knob (item 11)

1. Screw the knob (item 11) with the special screw II (item 7),
2. Put the washer III (item 20),
3. Screw the M6 screw (item 18).

## 2.6 The basis and the bearing column

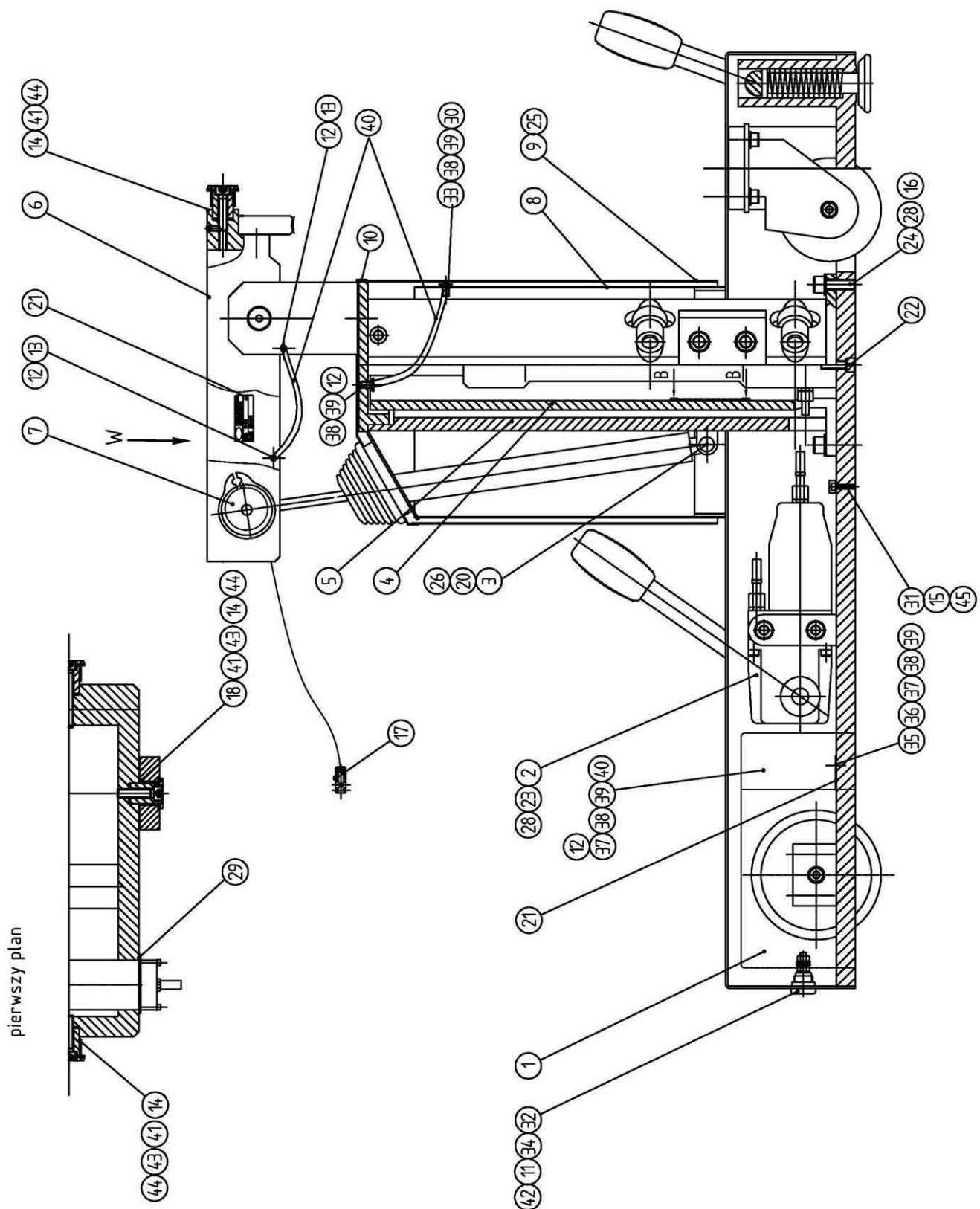


Fig.10 Base of the table in standard version

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Basis set	1	C047301000000000000	
2	Drive	1	C047302000000000000	
3	Trendelenburg pivot	1	C04730000000300000	
4	Telescope I set	1	C047304000000000000	
5	Telescope II set	1	C047305000000000000	
6	Yoke set	1	C047306000000000000	
7	Trendelenburg mechanism	1	C047307000000000000	
8	Fixed cover set	1	C047308000000000000	
9	Moving cover set	1	C047309000000000000	
10	Upper cover set	1	C047310000000000000	
11	Earthing cable	1	C0473AA0006000000	
12	Screw M6x10-A2-50	4	S06532060100006	
13	Washer A6-A2	2	S06534064000001	
14	Guiding sleeve I	4	C073600000014000	
15	Fixing element	1	S11300000000700	
16	Washer A10-A2	5	S06534105000002	
17	Driver	1	C047300000013000	
18	Bumper	2	C047300000018000	
20	Starlock	2	R50010-08-02-000	
21	Data plate	2	C00TF320000000000	
22	Screw M8x25-A2-70	1	S06531080250004	
23	Screw M10x16-A2-70	4	S06531100016005	
24	Screw M10x25-A4-80	5	S06531100250006	
25	Screw M3x10-A2-50	2	S06532030100009	
26	Washer A8-A2	6	S06534084000001	
28	Spring washer A10-A2	9	S06534102000002	
29	Spring retaining ring Z48	2	S06393000004800	
30	Screw M5x10-A2-50	1	S06532050100022	
31	Screw M4x10-A2-70	1	S06531040100002	
32	Potential equalising pivot	1	S11155000004256	
33	Nut M5-A2-70	1	S06533050000002	
34	Cable	1	C0473AA000800000	
35	Earthing screw	1	C028001010088000	
36	Earthing symbol	1	C017600005700000	
37	Nut M6-A2-70	3	S06533060000005	
38	Washer A6-A2	4	S06534064000001	
39	Spring washer A6-A2	4	S06534061000001	
40	Earthing cable	2	C0473AA000700000	
41	Slide sleeve	4	S30250100000200	
42	Potential equalising cable	1	S11155000004258	
43	Screw M8x35-A4-80	4	S06531080350008	
44	Set screw M5x10-A2-70	4	S06532050100023	
45	Band clip	1	S11500000000516	

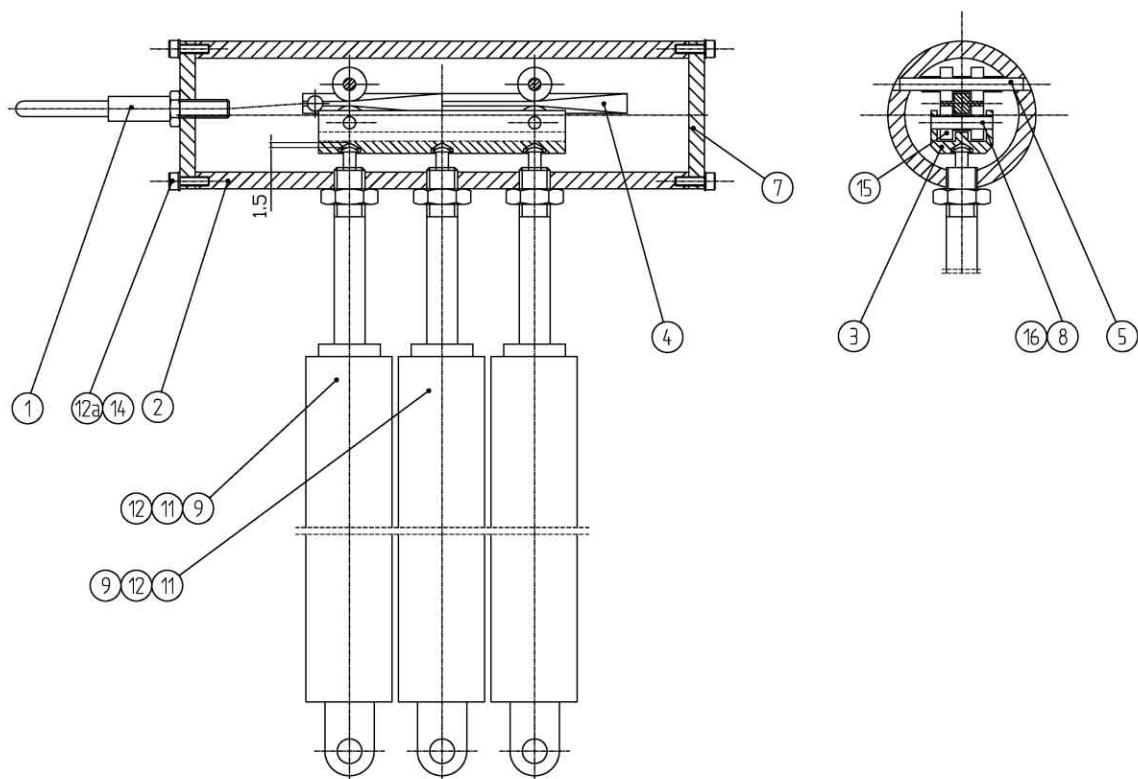


Fig.11 Trendelenburg mechanism

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Cord set	1	C047307010000000	
2	Sleeve	1	C047307000002000	
3	Slide	1	C047307000003000	
4	Crosshead	1	C047307000004000	
5	Pivot	2	C0473AA000400000	
7	Disk	1	C047307000007000	
8	Spacer	8	C047307000008000	
9	Pneumatic spring	3	R60020-4000160001	
11	Nut M10x1	3	S06522100001010	
12	Washer	3	S06522100001000	
12a	Screw M3x12-A2-70	4	S06531030120002	
14	Spring washer A3-A2	4	S06534031000001	
15	Bearing	8	S06310000200000	
16	Pivot	2	C047307000009000	

## 2.6.1 Adjustment of trendelenburg mechanism

If the handle which changes trendelenburg angle is turned till resistance is felt and the mechanism of pneumatic springs is not unlocked, one should:

1. Loosen the counteracting nut,
2. Unscrew the nut that controls the cords (item 1),
3. Lock the mechanism with the counter nut.

If that adjustment does not bring results, you should:

1. Loosen the counteracting nuts (item 11) of the pneumatic springs (item 9),

2. Screw the rods of pneumatic springs (all by the same distance) and lock wit the nuts.

If the trendelenburg mechanism starts automatically (without moving the trendelenburg handle) you should perform he activities described above but the other way round (the adjustment screw should be screwed and pneumatic springs unscrewed).

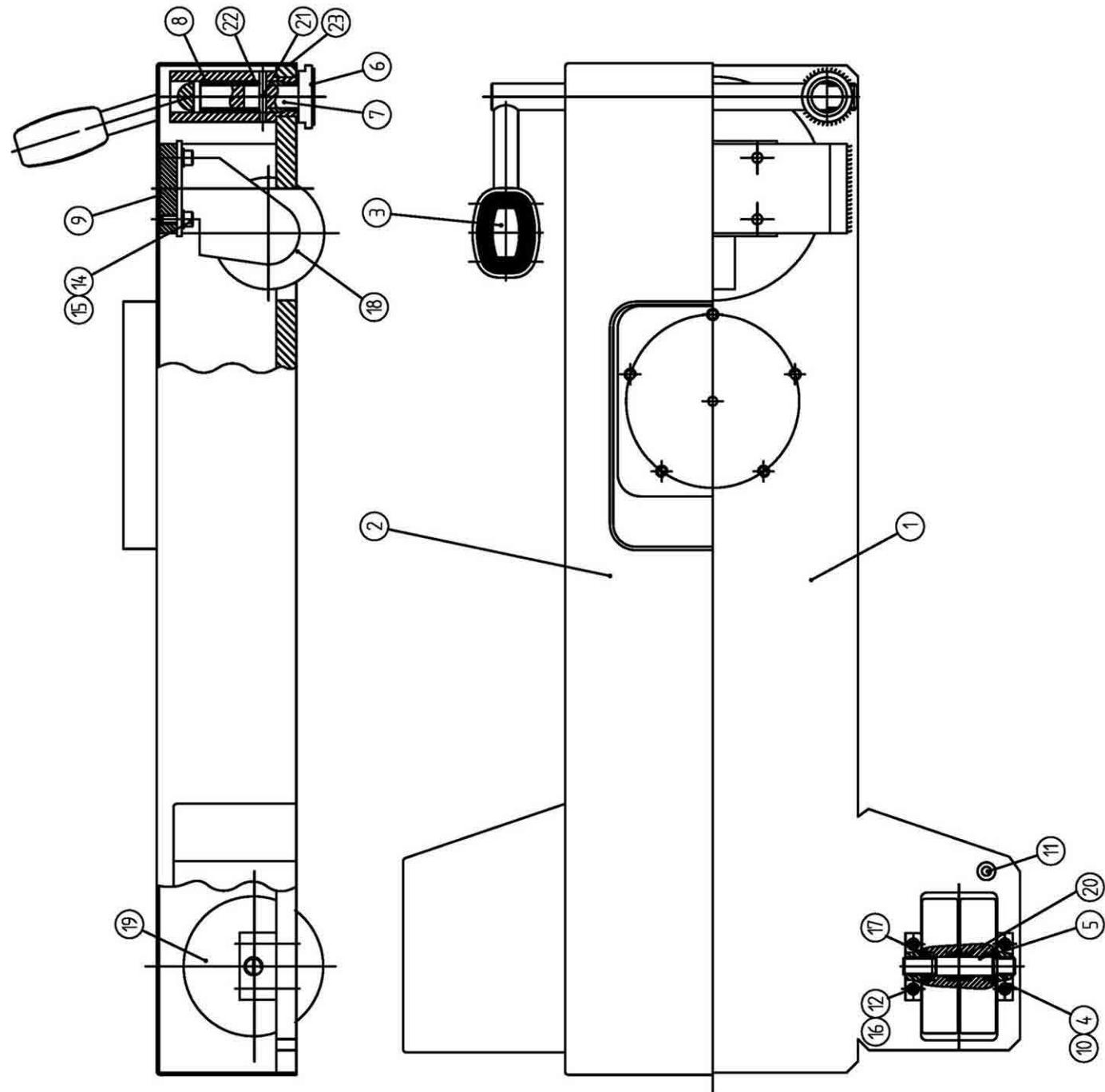


Fig. 12 Base of the table set (in standard version)

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Plate set	1	C047301010000000	
2	Cover set	1	C047301020000000	
3	Locking pedal	1	C047301030000000	
4	Wheel bracket	4	C050601000004000	
5	Wheel screw	2	C050601000005000	
6	Foot set	2	C047301060000000	
7	Pusher	2	C047301000007000	
8	Spring	2	C047301000008000	
9	Washer	1	C047301000009000	
10	Distance sleeve	2	C050601000010000	
11	Screw M6x20-A2-70	2	S06531060200006	
12	Screw M6x40-A2-70	8	S06531060400002	
14	Screw M8x20-A2-70	4	S06531080200004	
15	Spring washer A8-A2	4	S06534084000006	
16	Spring washer A6-A2	8	S06534061000001	
17	Distance sleeve III	2	C050601000018000	
18	Wheel	1	R60013-100-02000	
19	Wheel	4	R60013-125-02000	
20	Distance sleeve II	2	C050601000017000	
21	Locking screw	2	C050601000011000	
22	Lock washer	2	C050601000012000	
23	Flexible stopper	3	S13622910040400	

## 2.6.2 Replacement of moving wheels

### Disassembly of rotating wheel (item 18 on fig. 12)

4. Lift the table and put blocks made of hard wood under the basis (so that the table stands on them in a stable way and wheels do not touch the floor),
5. Unscrew M3 screws (item 25 on fig. 10) from the fixed cover (item 9 on fig. 10),
6. Lift the column covers and tie them up,
7. Unscrew M6 screws (item 11 on fig. 12).
8. Unscrew the lock pedal (item 3 on fig. 12) [turning it to the left] and remove it from the basis,
9. Lift the protection set (item 2 on fig. 12),
10. Unscrew M8 screws (item 14 on fig. 12) and remove them with the washers (item 15 on fig. 12),
11. Remove the wheel (item 18 on fig. 12).

### Assembly of rotating wheel (item 18 on fig. 12)

1. Put the wheel (item 18 on fig. 12) on the framework of the basis and screw M8 screws with washers (item 14, 15 on fig. 12),
2. Place the cover set (item 2 on fig. 12),
3. Screw the lock pedal (item 3 on fig. 12) (screw it to the right till resistance is felt and then unscrew by two rotations),
4. Screw M6 screws (item 11 on fig. 12) which fix the cover to the plate set (item 1 on fig. 12),
5. Move down the covers of the column,

6. Screw fixed covers (item 9 on fig. 10) to the cover of the basis with M3 screws (item 25 on fig. 10),
7. Remove wooden blocks and put the table on the floor.

Disassembly of non-rotating wheel (item 19 on fig. 12)

1. Perform activities according to items 1 ÷ 6 of instructions for ‘Disassembly of a rotating wheel (item 18 on fig. 12)’,
2. Unscrew M6 screws (item 12 on fig. 12) and remove washers (item 16 on fig. 12),
3. Take out the wheel (item 19 on fig. 12) with brackets (item 4 on fig. 12),
4. Unscrew one of the two brackets (item 4 on fig. 12) and remove the wheel with the distance sleeve (item 10 on fig. 12) from the screw of the wheel (item 5 on fig. 12).

Assembly of non-rotating wheel (item 19 on fig. 12)

1. Put the wheel with distance sleeves (item 10 on fig. 12) on the screw of the wheel (item 5 on fig. 12),
2. Screw the bracket (item 4 on fig. 12) on the screw of the wheel (item 5 on fig. 12),
3. Put the wheel (item 19 on fig. 12) in the basis,
4. Place washers (item 16 on fig. 12) and screw M6 screws (item 12 on fig. 12)

Perform activities according to items 2 ÷ 7 of instructions: ‘Assembly of a rotating wheel (item 18 on fig. 12)’.

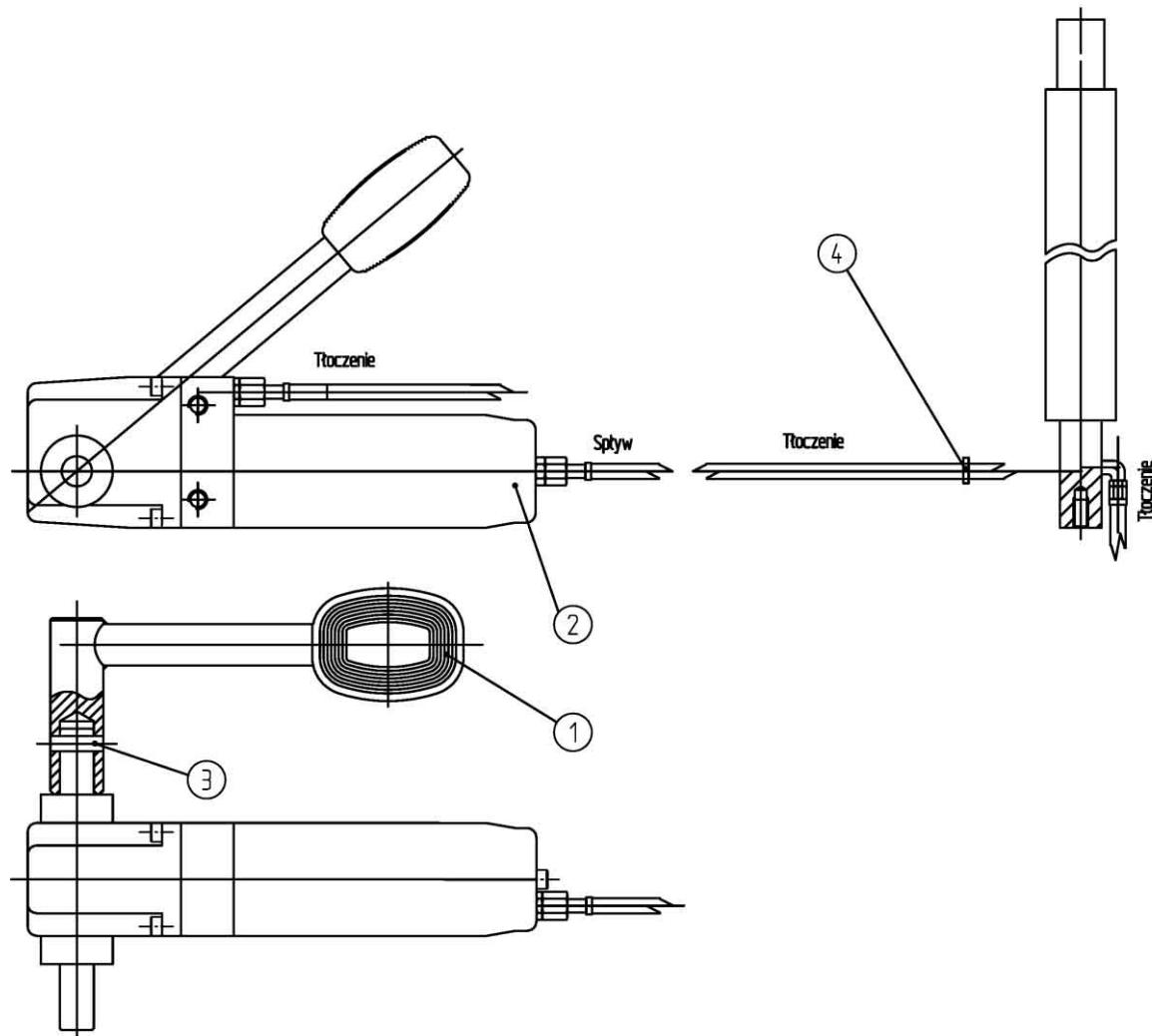


Fig. 13 Drive set

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Pedal set	1	C04730201000000000	
2	Pump set	1	S09165003002000	
3	Cylindrical peg 8x30-A	1	S06535060803002	
4	Band		S11500000000520	

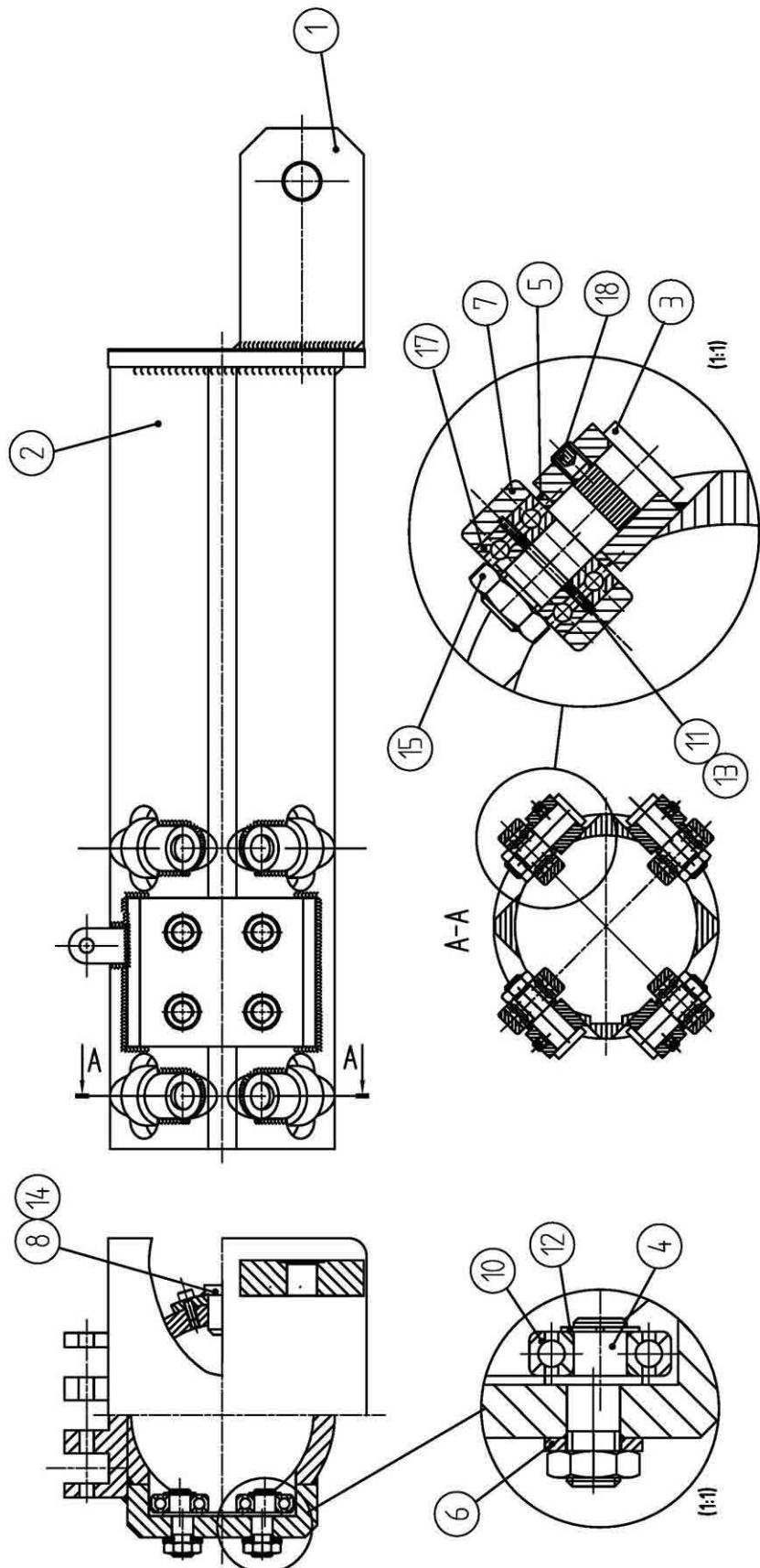


Fig. 14 Telescope II set

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Head	1	C047305010000000	
2	Trolley set	1	C047305020000000	
3	Pivot I	8	C047305000003000	
4	Pivot II	4	C047305000004000	
5	Washer I	8	C047305000005000	
6	Washer II	4	C047305000006000	
7	Roll	8	C047305000007000	
8	Lock set	1	C047305080000000	
10	Bearing	4	S06310001100001	
11	Washer	8	C047305000011000	
12	Spring retaining ring Z12	4	S06394000001200	
13	Spring retaining ring W28	8	S06393000002801	
14	Screw M5x12-A2-70	2	S06531050120001	
15	Nut M12x1,25-05	12	S09169000010000	
17	Ordinary ball bearing	16	S06310000060010	
18	Set screw	8	S06532060080007	

### 2.6.3 Removal of plays in the bearing column

Removal of plays in vertical axis of the table

1. Loosen the counter nut (item 15),
2. Press the pivot II (item 4) until resistance is felt,
3. Screw the counter nut.

Repeat that activity for all rolls.

Removal of plays in trendelenburg axis or in side inclination axis

1. Loosen the set screw (item 18) and the nut (item 15),
2. Press the pivot I (item 3) till resistance is felt.
3. Screw the counter nut and the set screw.

Repeat the activity for every loose roll. Press rolls symmetrically, in turns on both sides of the column.

Make adjustments in the basis in the mobile version in a similar way.

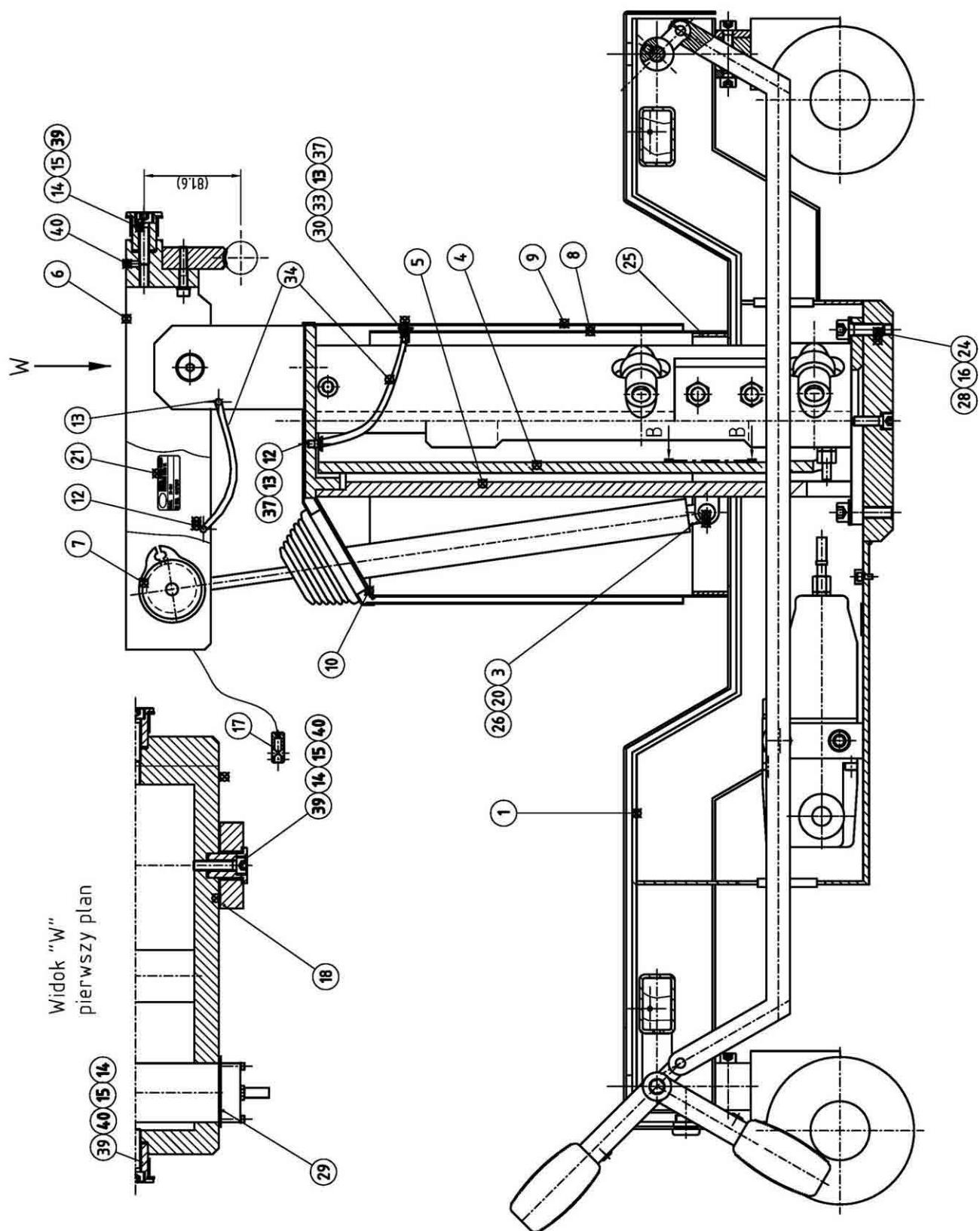


Fig.15 Base of the table in mobile version

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Basis set	1	C106601000000000000	
3	Trendelenburg pivot	1	C04730000000300000	
4	Telescope I set	1	C047304000000000000	
5	Telescope II set	1	C047305000000000000	
6	Yoke set	1	C047306000000000000	
7	Trendelenburg mechanism	1	C047307000000000000	
8	Fixed cover set	1	C047308000000000000	
9	Moving cover set	1	C047309000000000000	
10	Upper cover set	1	C047310000000000000	
12	Screw M6x10-A2-50	4	S06532060100006	
13	Washer A6-A2	2	S06534064000001	
14	Pilot sleeve I	4	C073600000014000	
15	Fixing element	1	S11300000000700	
16	Washer A10-A2	5	S06534105000002	
17	Driver	1	C047300000013000	
18	Bumper	2	C047300000018000	
20	Starlock	2	R50010-08-02-000	
21	Data plate	2	C00TF320000000000	
24	Screw M10x25-A4-80	5	S06531100250006	
25	Screw M3x10-A2-50	2	S06532030100009	
26	Washer A8-A2	6	S06534084000001	
28	Spring washer A10-A2	9	S06534102000002	
29	Spring retaining ring Z48	2	S06393000004800	
30	Screw M5x10-A2-50	1	S06532050100022	
33	Nut M5-A2-70	1	S06533050000002	
34	Cable	1	C0473AA000800000	
37	Nut M6-A2-70	3	S06533060000005	
39	Spring washer A6-A2	4	S06534061000001	
40	Earthing cable	2	C0473AA000700000	

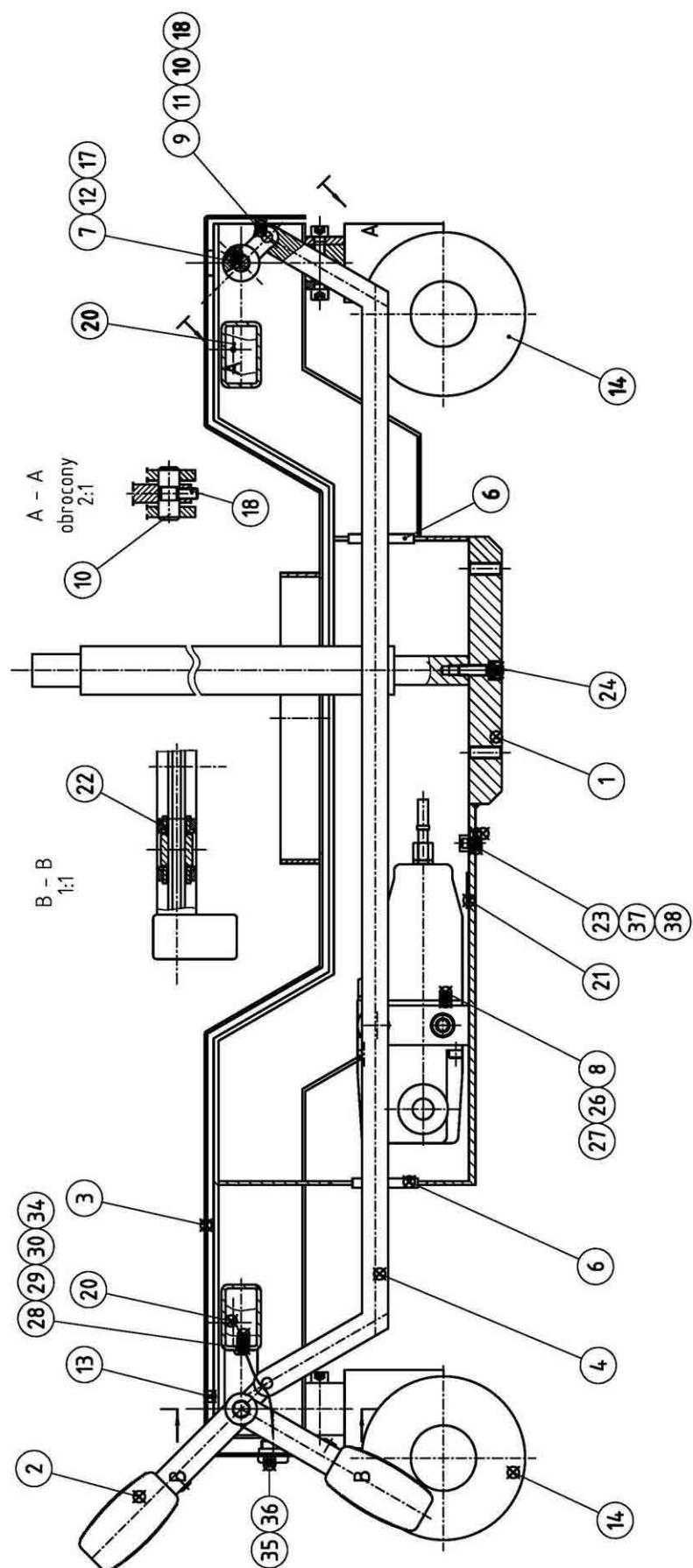


Fig.16 Base of the table set (in mobile version)

Pos. on the drawing No. 7	Part's name	Quantity	Part article number	Remarks
1	Framework set	1	C106601010000000	
2	Lock pedal	1	C106601020000000	
3	Basis cover	1	C106601030000000	
4	Crosshead set	1	C106601050000000	
6	Slide block	3	C106601000006000	
7	Roll	2	C106601000007000	
8	Drive set	1	C047302000000000	
9	Break lever	2	C43306000501000	
10	Break pivot	2	C043306000400000	
11	Washer Ø8	4	C047311000026000	
12	Spacer washer	4	C043300001300002	
13	Gum bumper	4	C014900000030000	
14	Wheels	1	R60012-125-10000	
17	Set screw M6x10-A4-80	2	S06532060100017	
18	Set screw M4x6-A4-80	2	S06532040060013	
20	Screw M4x12-A4-80	4	S06532040120004	
21	Data plate	2	C00TF320000000000	
22	Slide sleeve	2	C0106601000022000	
23	Screw M4x10-A2-70	1	S06531040100002	
24	Screw M8x25-A2-70	1	S06531080250004	
26	Screw M10x16-A2-70	4	S06531100016005	
27	Spring washer A10-A2	4	S06534102000001	
28	Screw M6x10-A2-70	1	S06532060100006	
29	Washer A6-A2	1	S06534064000001	
30	Spring washer A6-A2	1	S06534061000001	
34	Earthing symbol	1	C017600005700000	
35	Potential equalising cable	1	S11155000004258	
36	Potential equalising plug	1	S11155000004256	
37	Fixing element	1	S113000000000700	
38	Clamping band	1	S11500000000516	

## 2.6.4 Replacement of moving wheels

### Disassembly of a wheel (item 14)

1. Lift the table and place blocks made of hard wood under the basis (so that the table stands on them and the wheels do not touch the floor),
2. Unscrew M4 screws (item 20) from the framework of the basis, lift the cover set (item 3) and tie with the column covers to the table top,
3. Unscrew M6 set screws (item 17),
4. Remove the rolls (item 7),
5. Unscrew M8 screws (that fix the wheels),
6. Remove the wheel (item 14).

### Assembly of a wheel (item 14)

1. Put the wheel (item 14) on the framework of the basis and screw with M8 screws,
2. Put the rolls (item 7) and the lock pedal,

3. Screw M6 set screws (item17),
4. Put the cover set,
5. Screw M4 screws (item 20) that fix the cover set (item3),
6. Remove wooden blocks and put the table on the floor.